but after allowing for the fact that the divorce rate in the other states was much higher than in the registration states, the conclusion was reached that in each thousand dissolutions of marriages about 115 were by divorce and the remainder by death.

In view of all the evidence, it appeared that at least 8 out of every 100 marriages contracted in the United States would end in divorce. To this conclusion, however, the following important qualification was added:

It does not follow that this proportion, or anything like this proportion, obtains among those marriages which are celebrated between bachelors and spinsters. The fallacy involved in such an inference may be illustrated by assuming two cases.

1. Suppose 1,000 marriages between bachelors and spinsters of which 920 are finally broken by death and 80 by divorce, the surviving or divorced parties to these marriages continuing to live as widowed or divorced persons until death.

2. Suppose 940 marriages between bachelors and spinsters of which 920 are broken by death, the surviving parties in no case marrying again, and 20 are broken by divorce each one of these 40 divorced persons remarrying within that group and being again divorced. Suppose this process to continue until each one of the 40 persons has been married and divorced four times after which no new marriages are contracted.

In both cases we have to deal with 1,000 marriages and 80 divorces but in the first case 8.0 per cent. of the 1,000 marriages between bachelors and spinsters end in divorce and in the second case only 2.1 per cent. of the 940 marriages between bachelors and spinsters end in divorce. It is probable that the average conditions in the United States lie between these two hypothetical extremes but where they lie we do not know and cannot tell until trustworthy statistics are obtained regarding the previous marital condition (single, widowed, divorced) of all parties who enter upon married life. Until such statistics are secured I see no means of answering the vital question—What proportion of the marriages between bachelors and spinsters now end in a divorce?

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The Cancer Problem. William Seaman Bainbridge. The Macmillan Co., New York, 1914. Section III—Statistical Considerations, pp. 70–105.

A statistical chapter written by one who relies mainly upon other methods and uses statistics as a supplementary tool does not arouse high expectations and is not to be measured by exacting standards. With this qualification in mind, the chapter in the present work entitled "Statistical Considerations" deserves high commendation. Most of its constructive results are probable, if not established. The author wisely relies for the most part upon the work done by Newsholme, Bashford, and especially the English Registrar-General, from which sources he quotes at length. He also shows the lack of any connection between the cancer death rate and overcrowding, the non-existence of "cancer houses," the minor rôle played by heredity in the explanation of cancer, the independence of the two diseases, cancer and syphilis, and the error in the common opinion that Jews are exempt from the former scourge.

On the crucial question whether cancer is actually increasing or whether the increase in the death rate from this cause is due partly to a change in the age composition of the population but mainly to improved diagnosis, he takes the conservative and safe position that it "has not yet been decided" (page 104).

On two points perhaps a word of suggestion may be in place. No reference is made to a distinction of much importance for the question of increase, that between cancer as a disease and cancer as a cause of death. The author, as a physician and pathologist, may be supposed to be interested mainly in cancer as a disease, yet all his statistics relate to cancer as a cause of death. To be sure, no other figures exist; but this fact hardly relieves him from the duty of suggesting that what is true of the one may be far from true of the other, that, for example, cancer as a disease may be increasing even if cancer as a cause of death is not.

Again, one cannot but regret that a physician and especially an American physician should have spoken so slightingly of American vital statistics, even though he does it in good company. He returns to this topic several times and in doing so makes the only serious mistakes which I have noticed. Doubtless American cancer statistics of importance do not run far back and in many states are still lacking. But the statement that in this country "there are no reliable statistics concerning either the relative frequency of cancer in the past as compared with the present, or its relative frequency in different states, in different towns, or in town as compared with country districts" (page 74) can be defended only by giving the word "reliable" an emphasis not warranted by the context of the sentence quoted. The cancer statistics of Massachusetts run back to 1850, those of Providence, R. I., to 1856, and these figures are probably as "reliable" as those of Scotland, Ireland, or Germany. It is not true that European vital statistics are reliable in a sense in which American vital statistics are not. The main differences between the two are that American vital statistics in this and many other fields cover a shorter period of time and a smaller proportion of the population and, more serious still, that, owing to the lack of knowledge of vital statistics among American physicians, what figures we possess have been comparatively little utilized in the study of such questions as are of interest primarily to physicians.

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